

# 6

## DEMAND MANAGEMENT MEASURES

### 6.1 DEMAND MANAGEMENT MEASURE IMPLEMENTATION

#### ***Urban Water Management Planning Act Requirement:***

*#26. (Describe and provide a schedule of implementation for) each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following : (A) water survey programs for single-family residential and multifamily residential customers; (B) residential plumbing retrofit; (C) system water audits, leak detection, and repair; (D) metering with commodity rates for all new connections and retrofit of existing connections; (E) large landscape conservation programs and incentives; (F) high-efficiency washing machine rebate programs; (G) public information programs; (H) school education programs; (I) conservation programs for commercial, industrial, and institutional accounts; (J) wholesale agency programs; (K) conservation pricing; (L) water conservation coordinator; (M) water waste prohibition; (N) residential ultra-low-flush toilet replacement programs (10631 (f)(1) and (2)).*

*#27. A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented, or described under the plan (10631 (f)(3)).*

*#28. An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand (10631 (f)(4)).*

*#29. An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) take into account economic and noneconomic factors, including environmental, social, health customer impact,*

*and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation (10631 (g)).*

Triunfo Sanitation District/Oak Park Water Service (District) was an early signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding regarding Urban Water Conservation in California (MOU). CUWCC represents a diverse group of water supply agencies dedicated to establishing guidelines toward implementing conservation measures and managing supply demands. The CUWCC Best Management Practices (BMP) reports for 2009-2010 were filed and the detailed BMP reports are included in Appendix H.

The District became a signatory to the CUWCC MOU after elevated concern stemming from past drought years related to the adequacy of the water supply to the region. Now urban water suppliers are under considerable cost increases with water conservation and water reuse representing significant opportunity to constrain short- and long-term rising costs. The following table summarizes the BMPs/DMMs:

Table 6.1.1 CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs					
Type	Category	BMP #	BMP Name	DMM #	DMM Name
Foundational	Operations Practices	1.1.1	Conservation Coordinator	12	Water conservation coordinator
		1.1.2	Water Waste Prevention	13	Water waste prohibition
		1.1.3	Wholesale Agency Assistance Programs	10	Wholesale agency programs
		1.2	Water Loss Control	3	System water audits, leak detection, and repair
		1.3	Metering with Commodity Rates for All New Connections and	4	Metering with commodity rates for all new connections and retrofit of existing

**Table 6.1.1**  
**CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs**

Type	Category	BMP #	BMP Name	DMM #	DMM Name
			Retrofit of Existing Connections		connections
		1.4	Retail Conservation Pricing	11	Conservation pricing
	Education Programs	2.1	Public Information Programs	7	Public information programs
		2.2	School Education Programs	8	School education programs
Programmatic	Residential	3.1	Residential Assistance Program	1	Water survey programs for single-family residential and multifamily residential customers
				2	Residential plumbing retrofit
		3.2	Landscape Water Survey	1	Water survey programs for single-family residential and multifamily residential customers
		3.3	High-Efficiency Clothes Washing Machine Financial Incentive Programs	6	High-efficiency washing machine rebate programs
		3.4	WaterSense Specification (WSS) toilets	14	Residential ultra-low-flush toilet replacement programs
	Commercial, Industrial, and Institutional	4	Commercial, Industrial, and Institutional	9	Conservation programs for commercial, industrial, and institutional accounts
	Landscape	5	Landscape	5	Large landscape conservation programs and incentives

## 6.2 OPERATIONS PRACTICES

### 6.2.1 Conservation Coordinator (DMM 12)

The District has appointed an employee who is responsible for Water Conservation. Currently, the duties of the Water Conservation Coordinator do not require a full-time position, and therefore is part of the duties of another full-time employee. Duties for the Water Conservation Coordinator include:

- Coordination and oversight of conservation programs and DMM implementation.
- Keeping a log of conservation practices conducted throughout the District and point person(s) assigned to each area.
- Acting as the point of contact to the Public for general inquiries and requests for information.
- Communication and promotion of water conservation issues to the District senior management, and coordination of the District's conservation programs with operations and planning staff.

The person for the District's contact information is below:

Name: Scott Quady  
Address: 1001 Partridge Drive, Suite. 150, Ventura, CA-93003  
Phone: (805) 658-4658  
E-mail: [ScottQuady@VRSD.com](mailto:ScottQuady@VRSD.com)

### 6.2.2 Water Waste Prevention (DMM 13)

There are specific water waste prohibitions already stipulated in the District's Ordinance No. TSD-66, which can be found in Appendix G. This document works with the Water Shortage Contingency plan to reduce water waste during times of drought. For more information about the Water Shortage Contingency Plan, see Chapter 5: Water Supply Reliability and Water Shortage Contingency Plan. In addition, refer to Appendix H for the results of BMP 1.1.

### **6.2.3 Wholesale Agency Assistance Programs (DMM 10)**

This DMM is not required as the District is not a wholesale agency.

### **6.2.4 Water Loss Control (DMM 3)**

The District has implemented a system water audit to determine if leaks in the supply and distribution system exist and a method for repair in the event that the leaks become significant. Physical meter read observations are used as well as SCADA pressure monitoring and customer responses. Leak and repair reports are kept on file and mapped annually. Production is tracked monthly, and reviewed annually to determine if the system exhibits significant losses. If the metered sales divided by the total supply is greater than 0.9, the system is considered adequate. The District used the American Water Works Association (AWWA) Free Water Audit Software to analyze water losses in the system. According to the 2010 AWWA report, the total supply into the system was measured to be 2,737 AF and the metered sales were measured at 2,500 AF for the 2010 FY. This results in a metered sales / total supply ratio of 0.913, and thus a full scale audit was not required. Although not part of the AWWA reporting system, the values reported in Chapter 3 show a similar ratio: 2,557 AF of water into the system and 2,331 AF in metered delivers. This yields a metered sales / total supply ratio of 0.912. Refer to Appendix H for the results of BMP 1.2.

### **6.2.5 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (DMM 4)**

Part of DMM 4 includes the retrofitting of existing metered connections. The installation and use of meters at each and every point of use within the District since its formation was/is revenue driven. There are no known mixed-use meters (those serving both internal demands and landscaping) in a largely residential sector service area. All known services are metered.

Multi-family areas that have separate irrigation systems for greenbelt irrigation are identified and fitted with meters under homeowners associations. The CII accounts represent 1% of all accounts and less than 2% of the service area water use.

Installation standards, within Oak Park, are code regulated: the Ventura County Ordinance (e.g. Ord. 4369 of 2007, Sec. 101, Chapter 5, p. 7) adopts the standards of installation under the California Plumbing Code. Oak Park Water Service does not “T” off lateral lines. The typical installation for irrigation lines will have backflow devices associated with a separate meter.

There are nearly 400 backflow installations in Oak Park. Refer to Appendix H for the results of BMP 1.3.

### 6.2.6 Retail Conservation Pricing (DMM 11)

The District uses an inverted water rate structure to provide incentives to customers to reduce water use. The District develops pricing structures for water shortage stages with penalties in declared emergencies and incentives for recycled water use to conserve potable water resources. Below, Table 6.2.1 shows the current rate structure.

Table 6.2.1. Current Residential Rate Structure			
User Class	Tier 1 (0-6 HCF)	Tier 2 (7-28 HCF)	Tier 3 (28+ HCF)
Current Rate	\$2.95/Unit	\$3.67/Unit	\$4.63/Unit

Refer to Appendix H for the results of BMP 1.4.

## 6.3 EDUCATION PROGRAMS

### 6.3.1 Public Information Programs (DMM 7)

The District, Calleguas Municipal Water District (CMWD) and Las Virgenes Municipal Water District (LVMWD) work together to raise public awareness regarding many different issues regarding water and water supply. These issues include information pertaining to runoff pollution, water quality, and water conservation. The District is continuing to develop program information, implement budgets and identify future expenditures. Refer to Appendix H for the results of BMP 2.1.

### 6.3.2 School Education Programs (DMM 8)

The District, CMWD and LVMWD work together to promote school education programs and classroom activities to raise awareness. Refer to Appendix H for the results of BMP 2.2.

## **6.4 RESIDENTIAL PROGRAMS**

### **6.4.1 Residential Assistance Program (DMM 2)**

The District has developed a retrofit program to distribute water saving devices in conjunction with the water surveys in DMM 1. The District has developed partnerships or deferrals with the water districts in order to fund the program. Refer to Appendix H for the results of BMP 3.1.

### **6.4.2 Landscape Water Survey (DMM 1)**

The District has administered residential water survey programs to its single-family and multi-family residential customers. The surveys are completed by visits, and recommendations for the installation of low demand devices are offered. Refer to Appendix H for the results of BMP 3.2.

### **6.4.3 High Efficiency Washing Machine Financial Incentive Programs (DMM 6)**

CMWD/LVMWD has a high-efficiency washing machine rebate program that serves the customers of the District. Rebates were offered as of June 2008. Refer to Appendix H for the results of BMP 3.3.

### **6.4.4 WaterSense Specification (WSS) Toilets (DMM 14)**

The Metropolitan Water District of Southern California began its region-wide “Smart Rebate” Program in July of 2008. As an agency under CMWD and MWDSC, the ULFT Replacement program is administered by a subcontractor in the region. Refer to Appendix H for the results of BMP 3.4.

## **6.5 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL PROGRAMS**

### **6.5.1 Commercial, Industrial, and Institutional Programs (DMM 9)**

The District has initiated programs for Commercial, Industrial and Institutional (CII) incentives for water conservation. The District has identified and ranked CII's by water use for conservation priorities and developed strategies, implemented surveys and tracked accounts. Refer to Appendix H for the results of BMP 04.

## **6.6 LANDSCAPE PROGRAMS**

### **6.6.1 Large Landscape Conservation Programs and Incentives (DMM 5)**

The District has identified accounts with irrigation meters or that may have needed retrofitting with irrigation meters and has completed installs for all applications. The District encourages recycle water use for large landscape users as a part of the conservation program. Refer to Appendix H for the results of BMP 05.